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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,212	01/16/2004	Kohji Sakai	247061US2	5721
22850 7590 12/26/2006 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER	
			PHAN, JAMES	
			ART UNIT	PAPER NUMBER
			2872	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	12/26/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
- m	10/758,212	SAKAI, KOHJI
Office Action Summary	Examiner	Art Unit
•	James Phan	2872
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	. rely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status	*	•
Responsive to communication(s) filed on      This action is FINAL2b)⊠ This      Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro	
Disposition of Claims		•
4) ☐ Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.5-7 and 11 is/are rejected. 7) ☐ Claim(s) 2-4,8-10 and 12-14 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers	•	
9) The specification is objected to by the Examine 10) The drawing(s) filed on 16 January 2004 is/are:  Applicant may not request that any objection to the confidence of the	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		•
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 1/31/05:4/16/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite

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#### DETAILED ACTION

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### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

The information disclosure statement (IDS) submitted on 1/31/05 and 4/16/04 have been considered by the examiner.

## Claim Rejections - 35 USC § 112

Claims 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitations "the light sources", "the deflecting units" and "the scanning optical elements" in lines 2, 4 and 6, respectively. There is insufficient antecedent basis for each of these limitations in the claim. Claim 7 is rejected in that it is dependent on the indefinite claim and thus inherits the deficiencies above.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 5, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiyohara et al.

Kiyohara et al discloses an image forming apparatus comprising a photoreceptor (12); an optical scanner having a light source (2), a deflecting unit (9), a scanning optical element (11); and a synchronous detector including a photoreceiver (17) and a synchronous optical element (15) that focus the light beam deflected by the deflecting unit onto the photoreceiver (see Figs. 1-2), wherein the synchronous optical element satisfies a relationship fm<fd, where fm is a composite focal length of the scanning optical element in a main scanning direction, and fd is a composite focal length of the synchronous optical element in the main scanning direction (see column 8, lines 51-60).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyohara et al in view of Yoshizawa.

In regard to claim 6, Kiyohara et al discloses an optical scanner having all the features discussed above except for the use of a plurality of light sources, a plurality of deflecting units, and a plurality of scanning optical elements. However, such use is well

known in the art. Yoshizawa discloses an optical scanner having light sources (10-C,10-M), deflecting units (3u,3d) and scanning optical elements (4-C,4M); each of the scanning optical elements focuses the light beam deflected by a corresponding one of the deflecting unit onto a corresponding one of a surface (1C,1M) to be scanned (see Fig. 3 and the accompanying text, also see Fig. 6). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Yoshizawa in Kiyohara et al by using a plurality of light sources, a plurality of deflecting units, and a plurality of scanning optical elements so as to form a multi-beam scanner so as to reduce scanning time.

In regard to claim 7, see the arrangement of the identical scanning optical elements 4-C and 4-M in Fig. 3.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyohara et al in view of Ishihara et al.

Kiyohara et al discloses an optical scanner having all the features discussed above except for the use of a plurality of light sources, a plurality of deflecting units, and a plurality of scanning optical elements. However, the use of a plurality of optical scanners each having a light source, a deflecting unit, and a scanning optical element in an image forming apparatus is well known in the art. Ishihara et al discloses the use of a plurality of optical scanners (111,112,113,114) each having a light source (1), a deflecting unit (5) and a scanning optical element (61) in an image forming apparatus (see Figs. 1A and 8, and paragraph 0159). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of

Ishihara et al in Kiyohara et al by using a plurality of optical scanners each has the structure of the optical scanner disclosed in Kiyohara et al so as to form a color image apparatus.

### Allowable Subject Matter

Claims 2-4, 8-10 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the cited references teaches or fairly suggests the claimed invention having the combined features defined in each of claims 2-4, 8-10 and 12-14.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Phan whose telephone number is (571) 272-2317. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Phan

Primary Examiner

Art Unit 2872

JP

Dec. 2006